| Ple | ease print or type. (Form designed for use on elite (12-pitch) typewriter.) | 2. Page 1 of 3. E | 736-0 | 02 S | LPPW | 3/3/ a Form | O 1 Approved. OMB N | No. 2050-003 |
|--|---|---------------------------------|--|---|--|--|--|--|
| A | UNIFORM HAZARDOUS 1. Generator ID Number WASTE MANIFEST | 2. Page 1 of 3. E | nergency Respon | se Phone | 4. Manifest | Tracking Nu | mber 36525 | |
| - | 5. Generator's Name and Mailing Address | | rator's Site Addres | | nan mailing addre | ss) | <u> </u> | IVIVV |
| | 501 BIDAMES ST. | W. S. | Ame | | , | , | | |
| | P114 II 6 1354 | | | | | | | |
| | Generator's Phone: 65 234 - 15 25 6 6 Transporter 1 Company Name | | | | U.C. EDAID | N | Commence of the last of the la | |
| | Clean Harbors Environ minatal 5 | | | | U.S. EPA ID | | | |
| | 7. Transporter 2 Company Name | | <u> </u> | | U.S. EPA ID I | Number | 139350 | |
| | · | | | | | | | |
| | 8. Designated Facility Name and Site Address | - | | 7 | U.S. EPA ID I | Vumber | | *************************************** |
| | 11800 South STONY ISTONE ALE | | | | | | E de see à | |
| | 11809 South 570my Island Are, Eth. (200 Il 60017 Facility's Phone: (773) 646-4679 | | | | 1200 | 100000 | 7.71 | |
| | 9a. 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID N | lumber | 10. Conta | pinoro | | | | V |
| | HM and Packing Group (if any)) | arribot, | No. | Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Co | odes |
| 2 | U RQ, UN2055, WASTE STYTENE MONE | sm. C | | | 700. | | D001 D012 | <i>Z</i> - |
| GENERATOR | X 57.6.1 20 8 50 WT. ON 3, P6 111 | | 001 | | 3,000 | 6 | | |
| 開 | 2 | | | | | 3000 | A Comment of the Comm | |
| 8 | | | | | | | NAMES AND PARTY OF THE PARTY OF | *ACTOR ACTOR |
| 1 | | | | | | | TO SERVICE STATE OF THE SERVIC | COORDINATE INTERPRETATION OF THE PROPERTY OF T |
| - | 3. | | | | | | | www. |
| | | | | | | 422 | | *************************************** |
| Contraction of the Contraction o | 4. | | | | | | POSE FLANCE | s.i.lianomassou |
| - | | | | | | | | - Company of Company |
| | | | | | | | 50000000000000000000000000000000000000 | - |
| | 14. Special Handling Instructions and Additional Information | | 1 | | | | | |
| | 1. C45265813 CR6 # 128 | | | | | | | |
| | | | | | | | | |
| ı | 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents marked and labeled/placarded and are in all records in process and the contents. | of this consignment are full. | | | | | · | |
| | married and labeled placarded, and ale in all respects in proper condition for transfer | Off according to subjicable in: | ernational and nat | iscribed above ional governme | by the proper ship ental regulations. | oping name, a If export shipn | nd are classified, par nent and I am the Pri | ckaged, mary |
| | Exporter, I certify that the contents of this consignment conform to the terms of the a I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am | Miached EPA Acknowledame | t of Concent | | | | | · |
| | Generator's/Offeror's Printed/Typed Name | Signature | | Ŋ | ************************************** | | Month Da | y Year |
| \downarrow | GANESH KRISH | | prode a | BARNE | () | | 09 2 | 7 111 |
| Ē | 16. International Shipments Import to U.S. | Export from U.S. | Port of en | try/exit: | | | The second secon | |
| 2 | Transporter signature (for exports only): 17. Transporter Acknowledgment of Receipt of Materials | | Date leavi | | | | | |
| | Transporter 1 Printed/Typed Name | Signature | ······································ | | | - | Month Da | y Year |
| 8 | Willem Duncan | also de | Dimen . | -0- | | | 1912 | y rear |
| N A | Transporter 2 Printed/Typed Name | Signature | e a. | | Southern Control of the Control of t | 10 | Month Da | y Year |
| | 19 Diorposes | | Winds and a second state of the second state o | · | | | | and the same of th |
| 1 | 18. Discrepancy 18a. Discrepancy Indication Space | _ | | | | | | |
| | Type | e [| Residue | | Partial Rejec | ction | Full Re | ejection |
| | | . 6. | anifest Reference | Number | | | | |
| | 18b. Alternate Facility (or Generator) | IV | annosi izoididiide | Number. | U.S. EPA ID Nu | mber | | |
| 2 | - m | | | | | | r | - CANADA |
| 計 | Facility's Phone: 18c. Signature of Alternate Facility (or Generator) | | o a war and a way was a way was a war a way was a w | | | | | |
| DESIGNALED FACILITY | 5 | | | | | | Month Da | y Year |
| 3 | 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste | e treatment, disposal, and rec | voling systems) | | | | | |
| | 1. | 3. | , -mig oyaldiliaj | . ************************************* | 4. | | | |
| ιL | | | | | | | | |
| | 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials of Printed/Typed Name / / / / / / / / | | ot as noted in Item | 18a | | $Z = \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{j=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} $ | | |
| 1 1 | Time ur type u maille | Signature | / 1 7/ | | | | Month Day | Year |
| | | 1 | 1 1 | 1/4 | 4/// | | | / / 19" |
| , | Form 8700-22 (Rev. 3-05) Previous editions are obsolete. | | 4 | | 44 | | Y TO GENE | ' / / |

| US EPA Number: <u>I L D087154555</u> IEPA Number: <u>0990850005</u> Company name: <u>Flint Hills Resources Chemical</u> Address: <u>501 Brunner Street</u> , Peru, IL 61354 | ILLINOIS Environmental Protection Agency 2011 Hazardous Waste Report Form GM – Generation and Management |
|--|---|
| Instructions for this form found on pages 16-21. (Same UOM and decomposition of this form found on pages 16-21. (Same UOM and decomposition of the same under the same unde | solution . |
| C. Source Code: $G = \frac{32}{51}$ When Source Code is G25, enter Mai D. Form code: $W = \frac{119}{58}$ E. Waste Minimization | nagement Method producing residuals: H |
| SECTION 2. QUANTITY GENERATED [DENSITY MUS All generation that counts towards your generation totals must be A. UOM: 3 Density 8.3 lb/gal {Density of water} | T BE ENTERED FOR ALL WASTE STREAMS!] e included on a Form GM, regardless of where or how managed. is 08.34, most wastes are between 6 and 15} |
| B. Quantity generated in current reporting year: SECTION 3. QUANTITY MANAGED ON-SITE: Did this treatment, recycling, or disposal units at this location? DO 1 Y = Yes (continue to system 1) N = No (skip to section 4.) On-Site System 1: Management Method H Quantity M Quantity management Method H Quantity M Quantity management Method H Quantity M Quantity management M Quantity M Quant | location manage some or all of this waste in RCRA or UIC regulated NOT include RCRA exempt processes. |
| On-Site System 2: Management Method $\frac{H}{93}$ Quantity management Met | ged on-site this year: |
| SECTION 4. OFF- SITE SHIPMENT – Refer to page 29 for A. Was any of this waste shipped off site this reporting year? SITE 1. Name and address of off-site facility: Clea | Y Y = Yes (Continue to Site 1) N = No To Harbors Services, Inc. |
| 1180 | 00 South Stony Island Avenue, Chicago, IL 60617 ILD000608471 |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: H 120 108 D. Total quantity shipped in this reporting year: 124 124 | 26 101 |
| SITE 2. Name and address of off-site facility: | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| | |
| C. Management method shipped to: H 146 D. Total quantity shipped in this reporting year: | |
| SITE 3. Name and address of off-site facility: | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| 0.36 | |
| 172 | |
| SITE 4. Name and address of off-site facility: | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: $\frac{H}{198}$ | |
| D. Total quantity shipped in this reporting year: | |
| SITE 5. Name and address of off-site facility: B. U.S. EPA ID No. of facility waste was shipped to: 202 202 202 202 202 | |
| C. Management method shipped to: | |
| D. Total quantity shipped in this reporting year: | ·_ |
| COMMENTS: Y Enter Y (Yes) if you have comments regarding the | is page and attach extra sheet. |
| 238 | Page $\frac{00002}{13}$ |

| *** | | | | | | | | | | | | ንሳፎሳ ሳሳ |
|--|--|--|---|--|--|---|---|---|---------------------------------|--------------------------------------|---|--|
| UNIFOR | r type. (Form designe RM HAZARDOUS 11 TE MANIFEST | ed for use on elite (12-pit Generator ID Number | | 化氯化二甲基酚 医电子管 | () | gency Respon | 1381-5 | 4. Manifest | Tracking Nu | 04325 | 7444 | 2050-00 S |
| 5. Genera | ator's Name and Mailing (| TE 125 LEG 1 | MESH KRI | | PER | or's Site Addres | in bint | an mailing addre | ss) _{BONE} | SH KRI | 5H | |
| Generator 6. Transpo | r's Phone: orter 1 Company Name | SPORT, LLC - | | | | * | | U.S. EPA ID U.S. EPA ID | 58484 | | | |
| Nagas | | | | www. | | | | U.S. EPA ID | Number | | | |
| | T LIVERFOO | Site Address ORSE STREET OH 43980 O 385-7336 | | | | | | 1 | 180613 | 541 | | |
| | CHARLES THE RESIDENCE OF THE PARTY OF THE PA | (including Proper Shipping | Name, Hazard Class, I | D Number, | | 10. Con No. | tainers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. | Waste Code | s |
| 11111 | | 5, WASTE STYF 3, PGIII, (DO) | RENE MONOM | | | | | | | I/OOI | | |
| | (13 | 3×55 0M | | ···· | | 33 | PM | 1815 | CT- | | | A. Prince of the Control of the Cont |
| 2. | UNESZE, W DRGANIC. N. | ASTE FLAMMA D.S., 4.1 (6.1 | BLE SOLIUS 1),PSII,(S Vi | TYPENE | | 2 | DМ | 140 | 5 | 1001 | es-arrivação para acesa | |
| 3. | | | | | | | | CONTRACTOR OF THE PARTY OF THE | | | | |
| | | | | | | | 1 | | | | ì | ğ |
| 14. Spec | sial Handling Instructions | s and Additional Information | 000_W27_Q4 | 57228_LDf | - A | | | | RITAGE | | | |
| 14. Spec. 3 . O.C. 15. GE mai | ial Handling Instructions O M 1 7 0 38 7 NERATOR'S/OFFEROF rked and labeled/placard porter, I certify that the co | R'S CERTIFICATION: I her ded, and are in all respects i ontents of this consignment mization statement identified | eby declare that the coi | ntents of this consigr ransport according to f the attached EPA A | nment are fully o applicable int cknowledgmen ity generator) o | ernational and at of Consent. | national governi small quantity g | re by the proper mental regulation | shipping nam | ne, and are cla | ssified, pacl | kaged, nary |
| 14. Spec 15. GE mai Exp | ial Handling Instructions 10 W17 U387 INERATOR'S/OFFEROF riked and labeled/placers | R'S CERTIFICATION: I her ded, and are in all respects i ontents of this consignment mization statement identified bed Name | eby declare that the coi | ntents of this consigr ransport according to f the attached EPA A | nment are fully o applicable int cknowledgmen ity generator) o Signature | ernational and nt of Consent. or (b) (if I am a | national governi | re by the proper of the mental regulation enerator) is true. | shipping nam | ne, and are cla hipment and Mo | ssified, pacl | kaged, nary |
| 14. Spec | NERATOR'S/OFFEROF riked and labeled/placarc porter, I certify that the country of s/Offeror's Printed/Typ | R'S CERTIFICATION: I her ded, and are in all respects is ontents of this consignment mization statement identified and Name Import to U.S. | eby declare that the coi | ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully o applicable int cknowledgmen ity generator) o Signature | ernational and of Consent. or (b) (if I am a | national governi small quantity go f entry/exit: | re by the proper of the mental regulation enerator) is true. | shipping nam | ne, and are cla hipment and Mo | assified, pact am the Prin | kaged, nary |
| 14. Spec | in Handling Instructions NERATOR'S/OFFEROF riked and labeled/placarc porter, I certify that the carefully that the waste minior's/Offeror's Printed/Typ Inational Shipments orter signature (for exports porter Acknowledgment | R'S CERTIFICATION: I her ded, and are in all respects is ontents of this consignment mization statement identified and Name Import to U.S. ts only): | eby declare that the coi | ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully to applicable into cknowledgmer (ty generator) of Signature trom U.S. | ernational and of Consent. or (b) (if I am a | national governi | re by the proper of the mental regulation enerator) is true. | shipping nam | ne, and are cla hipment and Mc | assified, pack am the Prin onth Day | kaged, nary / Ye |
| 14. Spec | ENERATOR'S/OFFEROF rked and labeled/placarc porter, I certify that the caperity that the waste mininor's/Offeror's Printed/Typ Anational Shipments orter signature (for exporter) | R'S CERTIFICATION: I her ded, and are in all respects is ontents of this consignment mization statement identified and Name Import to U.S. ts only): | eby declare that the coi | ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully o applicable int cknowledgmen ity generator) of Signature | ernational and of Consent. or (b) (if I am a | national governi small quantity go f entry/exit: | re by the proper of the mental regulation enerator) is true. | shipping nam | ne, and are cla hipment and Mo | assified, pactar am the Print Day | xaged, nary |
| 14. Spec | in Handling Instructions NERATOR'S/OFFEROF riked and labeled/placarc porter, I certify that the carefully that the waste minior's/Offeror's Printed/Typ Inational Shipments orter signature (for exports porter Acknowledgment | R'S CERTIFICATION: I her ded, and are in all respects i ontents of this consignment imization statement identified bed Name Import to U.S. its only): | eby declare that the coi | ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully to applicable into cknowledgmer (ty generator) of Signature trom U.S. | ernational and of Consent. or (b) (if I am a | national governi small quantity go f entry/exit: | re by the proper of the mental regulation enerator) is true. | shipping nam | ne, and are cla hipment and Mo | assified, pack am the Prin onth Day | kaged, nary |
| 14. Special Sp | ENERATOR'S/OFFEROF rked and labeled/placaro porter, I certify that the co ertify that the waste minin or's/Offeror's Printed/Type national Shipments orter signature (for export sporter Acknowledgment rter 1 Printed/Typed Nan rter 2 Printed/Typed Nan rrepancy | R'S CERTIFICATION: I here ded, and are in all respects i ontents of this consignment mization statement identified sed Name Import to U.S. ts only): of Receipt of Materials ne | eby declare that the coi | ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully o applicable into cknowledgmer ity generator) o Signature t from U.S. | ernational and of Consent. or (b) (if I am a | national governi small quantity go f entry/exit: | re by the proper mental regulation enerator) is true. | shipping nam | ne, and are cla hipment and Mo | assified, pacial am the Printh Day | xaged, nary |
| 14. Special Sp | ENERATOR'S/OFFEROF rked and labeled/placarc porter, I certify that the care trifty that the waste minit or's/Offeror's Printed/Type national Shipments orter signature (for export sporter Acknowledgment rter 1 Printed/Typed Nam rter 2 Printed/Typed Nam | R'S CERTIFICATION: I here ded, and are in all respects i ontents of this consignment mization statement identified sed Name Import to U.S. ts only): of Receipt of Materials ne | eby declare that the cor in proper condition for the conform to the terms of d in 40 CFR 262.27(a) (| ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully o applicable into cknowledgmer ity generator) o Signature t from U.S. | ernational and of Consent. or (b) (if I am a | national governi small quantity go f entry/exit: | re by the proper of the mental regulation enerator) is true. | shipping nam | ne, and are cla hipment and Mo | assified, pacial am the Printh Day | xaged, nary |
| 14. Spec | ENERATOR'S/OFFEROF rked and labeled/placaro porter, I certify that the co ertify that the waste minin or's/Offeror's Printed/Type national Shipments orter signature (for export sporter Acknowledgment rter 1 Printed/Typed Nan rter 2 Printed/Typed Nan rrepancy | R'S CERTIFICATION: I here ded, and are in all respects is ontents of this consignment mization statement identified sed Name Import to U.S. ts only): of Receipt of Materials ne | eby declare that the cor in proper condition for the conform to the terms of d in 40 CFR 262.27(a) (| ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully papplicable into cknowledgmer ity generator) of Signature the from U.S. Signature Signature | ernational and to f Consent. or (b) (if I am a a Port o Date Is | small quantity gr | re by the proper mental regulation enerator) is true. | shipping nam is. If export s | ne, and are cla hipment and Mo | assified, pacial am the Printh Day | xaged, nary |
| 14. Spec | isial Handling Instructions INERATOR'S/OFFEROF riked and labeled/placare porter, I certify that the contify that the vaste minin or's/Offeror's Printed/Type national Shipments orter signature (for export sporter Acknowledgment riter 1 Printed/Typed Nan repancy screpancy Indication Spa | R'S CERTIFICATION: I here ded, and are in all respects is ontents of this consignment mization statement identified sed Name Import to U.S. ts only): of Receipt of Materials ne | eby declare that the cor in proper condition for the conform to the terms of d in 40 CFR 262.27(a) (| ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully papplicable into cknowledgmer ity generator) of Signature the from U.S. Signature Signature | ernational and to f Consent. or (b) (if I am a a Port o Date Is | small quantity gr | re by the proper mental regulation enerator) is true. | shipping nam is. If export s | ne, and are cla hipment and Mo | assified, pacial am the Printh Day | xaged, nary |
| 14. Special Sp | in Printed/Typed Nan Prepancy Indication Spa | R'S CERTIFICATION: I her ded, and are in all respects is contents of this consignment mization statement identified bed Name Import to U.S. its only): of Receipt of Materials in the content of the con | eby declare that the cor in proper condition for the conform to the terms of d in 40 CFR 262.27(a) (| ntents of this consign ransport according to f the attached EPA A (if I am a large quant | nment are fully papplicable into cknowledgmer ity generator) of Signature the from U.S. Signature Signature | ernational and to f Consent. or (b) (if I am a a Port o Date Is | small quantity gr | re by the proper mental regulation enerator) is true. | shipping nam is. If export s | Mc | assified, paci am the Prin onth Day | xaged, nary |
| 14. Special Sp | initial Handling Instructions INERATOR'S/OFFEROF riked and labeled/placare porter, I certify that the country that the vaste minit or's/Offeror's Printed/Type Inational Shipments Inter signature (for export sporter Acknowledgment riter 1 Printed/Typed Nan Inter 2 Printed/Typed Nan Inter 2 Printed/Typed Nan Inter 2 Printed/Typed Nan Inter 3 Printed/Typed Nan Inter 4 Printed/Typed Nan Inter 5 Printed/Typed Nan Inter 6 Printed/Typed Nan Inter 7 Printed/Typed Nan Inter 8 Phone: Inature of Alternate Facil Inter 9 Printed/Typed Nan Inter | R'S CERTIFICATION: I her ded, and are in all respects is contents of this consignment mization statement identified bed Name Import to U.S. to only): In of Receipt of Materials me Quantity ator) ity (or Generator) | eby declare that the cor in proper condition for tr conform to the terms of d in 40 CFR 262.27(a) (| ntents of this consign ransport according to the attached EPA A (if I am a large quant) | nment are fully of applicable into cknowledgmer ity generator) of Signature the from U.S. Signature Signature disposal, and recognitions and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal, and recognitions are supposed to the following signature disposal s | ernational and to of Consent. or (b) (if I am a series of Consent. or (b) (if I am a series of Consent. or (b) (if I am a series of Consent. or (c) (if I am a series or | mational governing and a second small quantity grant fentry/exit: | Partial F | shipping nam is. If export s | Mc | assified, paci am the Prin onth Day | xaged, anary |
| 14. Specific and the second se | isial Handling Instructions NERATOR'S/OFFEROF riked and labeled/placare porter, I certify that the contify that the vaste minin or's/Offeror's Printed/Type national Shipments orter signature (for export sporter Acknowledgment riter 1 Printed/Typed Nan riter 2 Printed/Typed Nan repancy screpancy Indication Spa ernate Facility (or General s Phone: gnature of Alternate Facil cardous Waste Report Ma | R'S CERTIFICATION: I her ded, and are in all respects is ontents of this consignment mization statement identified bed Name Import to U.S. to only): of Receipt of Materials me Import to U.S. to only): at only its only i | eby declare that the coin proper condition for the conform to the terms of d in 40 CFR 262.27(a) (| ntents of this consignal ransport according to the attached EPAA (if I am a large quant) Type Type | mment are fully of applicable into cknowledgmentity generator) of Signature at from U.S. Signature Signature at from U.S. Signature 3 Signature 3 3. | ernational and to of Consent. or (b) (if I am a series of Consent.) Port o Date le Residue Manifest Reference of Consent. Or (b) (if I am a series of Consent.) | mational governing mail quantity graph of entry/exit:eaving U.S.: | re by the proper mental regulation enerator) is true. | shipping nam is. If export s | Mc | assified, paci am the Prin onth Day | xaged, anary |
| 14. Special Sp | isial Handling Instructions NERATOR'S/OFFEROF riked and labeled/placare porter, I certify that the contify that the vaste minin or's/Offeror's Printed/Type national Shipments orter signature (for export sporter Acknowledgment riter 1 Printed/Typed Nan riter 2 Printed/Typed Nan repancy screpancy Indication Spa ernate Facility (or General s Phone: gnature of Alternate Facil cardous Waste Report Ma | R'S CERTIFICATION: I her ded, and are in all respects is contents of this consignment indication statement identified and Name Import to U.S. its only): of Receipt of Materials in the Import in the | eby declare that the coin proper condition for the conform to the terms of d in 40 CFR 262.27(a) (| ntents of this consignal ransport according to the attached EPAA (if I am a large quant) Type Type | mment are fully of applicable into cknowledgmentity generator) of Signature at from U.S. Signature Signature at from U.S. Signature 3 Signature 3 3. | ernational and to of Consent. or (b) (if I am a series of Consent.) Port o Date le Residue Manifest Reference of Consent. Or (b) (if I am a series of Consent.) | mational governing mail quantity graph of entry/exit:eaving U.S.: | Partial F | shipping nam is. If export s | ne, and are cla hipment and Mc | assified, paci am the Prin onth Day | xaged, nary |

| US EPA Number: <u>I L D087154555</u> IEPA Number: <u>0990850005</u> Company name: Flint Hills Resources Chemical Address: <u>501 Brunner Street</u> , Peru, IL 61354 | ILLINOIS Environmental Protection Agency 2011 Hazardous Waste Report Form GM – Generation and Management |
|--|---|
| Instructions for this form found on pages 16-21. (Same UOM and density must SECTION 1. WASTE DESCRIPTION A. Waste Description: Waste Styrene Monomer (stabilized) in solution B. EPA Hazardous Waste Code D001 31 35 39 39 C. Source Code: G 32 When Source Code is G25, enter Management 1 | |
| C. Source Code: $G = \frac{32}{51}$ When Source Code is G25, enter Management ID. Form code: $W = \frac{119}{58}$ E. Waste Minimization Code $\frac{X}{62}$ | Method producing residuals: H |
| SECTION 2. QUANTITY GENERATED [DENSITY MUST BE END All generation that counts towards your generation totals must be included of A. UOM: 3 Density 8. 3 Density 9. 3 Density | TERED FOR ALL WASTE STREAMS!] on a Form GM, regardless of where or how managed. uost wastes are between 6 and 15} |
| B. Quantity generated in current reporting year: 26,1 | <u>01</u> . <u>o</u> |
| SECTION 3. QUANTITY MANAGED ON-SITE: Did this location material treatment, recycling, or disposal units at this location? DO NOT includes Y = Yes (continue to system 1) N = No (skip to section 4.) | anage some or all of this waste in RCRA or UIC regulated |
| On-Site System 1: Management Method H Quantity managed on-site | this year: |
| On-Site System 1: Management Method $\frac{H}{79}$ Quantity managed on-site on-Site System 2: Management Method $\frac{H}{93}$ Quantity managed on-site on-site of the system $\frac{H}{93}$ Quantity managed on | his year: |
| SECTION 4. OFF- SITE SHIPMENT – Refer to page 29 for common A. Was any of this waste shipped off site this reporting year? Y = Yes (| errors on facilities & management methods. |
| SITE 1. Name and address of off-site facility: Clean Harbors | |
| 11800 South S | tony Island Avenue, Chicago, IL 60617 |
| D. C.S. Zilliz itc. of incinity waste was simpled to. | |
| C. Management method shipped to: H 141 D. Total quantity shipped in this reporting year: 26,10 | 21 . |
| D. Total quantity simpled in this reporting year. | <u>,, , , , , , , , , , , , , , , , , , ,</u> |
| SITE 2. Name and address of off-site facility: | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: H | |
| D. Total quantity shipped in this reporting year: | |
| SITE 3. Name and address of off-site facility: | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: H 172 160 | |
| D. Total quantity shipped in this reporting year: | |
| SITE 4. Name and address of off-site facility: | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: H | |
| D. Total quantity shipped in this reporting year: | |
| SITE 5. Name and address of off-site facility: B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: | |
| D. Total quantity shipped in this reporting year: | :_ |
| COMMENTS: Y Enter Y (Yes) if you have comments regarding this page and 238 | Page 00002 |

| US EPA Number: <u>I L D087154555</u> IEPA Number: <u>0990850005</u> Company name: <u>Flint Hills Resources Chemical</u> Address: <u>501 Brunner Street</u> , Peru, IL 61354 | ILLINOIS Environmental Protection Agency 2011 Hazardous Waste Report Form GM – Generation and Management |
|--|--|
| Instructions for this form found on pages 16-21. (Same UOM and density must SECTION 1. WASTE DESCRIPTION A. Waste Description: Waste Styrene Monomer B. EPA Hazardous Waste Code D001 3T 3T 35 37 39 39 39 | т z |
| C. Source Code: G 11 When Source Code is G25, enter Management I | Method producing residuals: H |
| D. Form code: W 210 E. Waste Minimization Code X | ~ |
| SECTION 2. QUANTITY GENERATED [DENSITY MUST BE ENT.] All generation that counts towards your generation totals must be included. A. UOM: 3 Density 7.58 lb/gal {Density of water is 08.34, m | on a Form GM, regardless of where or how managed. lost wastes are between 6 and 15} |
| B. Quantity generated in current reporting year: 16,7 | <u>13</u> . <u>0</u> |
| SECTION 3. QUANTITY MANAGED ON-SITE: Did this location metreatment, recycling, or disposal units at this location? DO NOT inclus $\frac{N}{N}$ Y = Yes (continue to system 1) N = No (skip to section 4.) | anage some or all of this waste in RCRA or UIC regulated |
| On-Site System 1: Management Method H Quantity managed on-site | this year: |
| On-Site System 2: Management Method H Quantity managed on-site | this year: |
| SECTION 4. OFF-SITE SHIPMENT - Refer to page 29 for common A. Was any of this waste shipped off site this reporting year? $\frac{Y}{107}$ Y = Yes (SITE 1. Name and address of off-site facility: | errors on facilities & management methods |
| | |
| | Saint George Street, East Liverpool, OH 43920 OHD980613541 |
| 108 | |
| C. Management method shipped to: H 40 D. Total quantity shipped in this reporting year: 124 D. Total quantity shipped year: 124 D. Total q | 13 0 |
| SITE 2. Name and address of off-site facility: | |
| • | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: H | |
| D. Total quantity shipped in this reporting year: | -·- |
| SITE 3. Name and address of off-site facility: | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: | |
| D. Total quantity shipped in this reporting year: | |
| SITE 4. Name and address of off-site facility: | |
| B. U.S. EPA ID No. of facility waste was shipped to: | |
| C. Management method shipped to: | |
| D. Total quantity shipped in this reporting year: | |
| SITE 5. Name and address of off-site facility: B. U.S. EPA ID No. of facility waste was shipped to: 212 | |
| C. Management method shipped to: H | |
| D. Total quantity shipped in this reporting year: | |
| COMMENTS: N Enter Y (Yes) if you have comments regarding this page and | attach extra sheet. |
| 238 | Page 00014 |

40



Root Cause Failure Analysis – RCFA 1045- Tank Farm M1 Filter Gasket Failure

PURPOSE: Determine the cause of the filter housing lid gasket failure on the tank farm monomer

DATE OF RCFA: recirculation system.

10/10/11

PROBLEM Gasket failure on the monomer recirculation filter resulted in approximately 50 gallons

DEFINITION - spraying onto the pump pad inside the tank farm containment area.

WHAT: Monomer spill incident

WHEN: 9/27/11

WHERE: I-F-1150, Tank Farm Monomer recirculation filter

CLASSIFICATION: Moderate environmental Incident

Safety:

Environmental: Non reportable

Revenue Loss: 50 Gal styrene (375 lbs) @ .684 / lb = \$257.00

Out of pocket cost: \$9550.00 Safe Harbor disposal & Eagle Clean up cost - \$750 FHR Hazmat labor

Frequency:

Description: Utilities Operator went to Tank Farm at approx 07:15 to obtain permit readings for Hot

Work & Confined Space work that was scheduled to take place in the Tank Farm. When he entered the Tank Farm from the south-east ramp he noticed an odor of styrene. Continued his route taking readings and approached the M-1 Pump Pad and noticed styrene spraying from 1200 Circulating Filter Vessel. >>Leak observed (via Guardhouse

camera) at 06:59 >> Utilities Operator found leak when taking permit readings with meter

at 07:18

Immediate Corrective Pump shutdown and valves closed off and leak stops at 07:20 (((Approx 50 gallons of

Action: styrene leaked from filter unit.))) Utilities Operator notified Production Facilitator of situation. Operator & Facilitator shutdown Circulating Pump 1200 and associated valves.

Secured Area / Entrances. Notified Health & Safety for support in clean up and monitoring. Notified Environmental of spill. Eagle Services was on sight for another

project - used them for clean-up of M-1 on Tank Farm floor.

ROOT CAUSE: Gasket & filter system design not compatible to application requirements. Most

likely, due to a previous failure of the OEM gasket, a non-spec gasket was placed into

service with no documentation.

RCFA SUMMARY: Following filter replacement on 9/22/11, the OEM recommended gasket for the

filter, Crib stock # 015150 was installed on the filter. On 9/27/11, five days following the

installation of the OEM gasket, the gasket failed.

| CORRECTIVE ACTIONS | RESPONSIBLE PERSON | DUE | DONE |
|---|-----------------------|------------|----------|
| Forward environmental & clean up costs related to this incident to the RCFA Coordinator | Thurman / Krish | 10/15/10 | 10/10/11 |
| 2.Obtain Gasket pressure rating & torque | Stoneking | 10/31/11 | 10/28/11 |
| spec from manufacturer. 3. Create temporary MOC for non spec gaskets that were found in service and then (same type) put back into service following the failure of the OEM / Crib | Stoneking | 10/31/11 | 10/28/11 |
| stock gasket. | Stoneking | 4/30/2012 | |
| 4. Specify and install the proper relief valve for the filtration vessel. 5. Source & install a replacement filtration system specific to the application that is compliant to the 150 AAS/150 AP PN01CS1S01 styrene | Stoneking | 10/31/2012 | |
| piping spec. | | | |

ATTENDEES

| FACILITATOR: | Mark Stoneking | Maintenance |
|--------------|----------------|--------------------|
| | | Planner |
| ATTENDEES: | Jeff Moran | Reliability Center |
| | | Manager |
| | Doug Thurman | Production |
| | | Facilitator |
| | Ganesh Krish | Environmental |
| | | Manager |
| | Jon Duff | Maintenance |
| | | Mechanic |